



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,495	01/02/2001	Jeffrey H. Sherman	AVISTA/209-1014	2162

7590

04/25/2005

THOMASON, MOSER & PATTERSON, L.L.P.
ATTN: N. ALEXANDER NOLTE
3040 POST OAK BLVD.,
SUITE 1500
Houston, TX 77056

EXAMINER

GRIFFIN, WALTER DEAN

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,495

Applicant(s)

SHERMAN ET AL.

Examiner

Walter D. Griffin

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,6-9,11-13,16-22,25-28,31,32,34-36 and 39-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,6-9,11-13,16-22,25-28,31,32,34-36 and 39-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The rejection of claims 4, 6-9, 11-13, and 16-22 under 35 USC 103 as described in the paper mailed on October 28, 2004 have been withdrawn in view of the amendment filed on February 28, 2005. The WO 97/00928 reference does not disclose the step of processing the mixture of used oil and base compound to provide an at least partially dehydrated mixture.

A new rejection follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4, 6, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Norman (US 4,431,524).

The Norman reference discloses a process for treating a used oil. The process comprises contacting the oil with an aqueous solution of the basic salt of an alkali metal such as sodium hydroxide. The resulting mixture is then treated to separate water from the oil. This step necessarily produces an at least partially dehydrated used oil. The used oil is then mixed with a glycol such as ethylene glycol. The oil and glycol mixture is then passed to a separator to remove

Art Unit: 1764

contaminants from the oil. See column 3, lines 15-48; column 8, lines 13-24; and column 10, line 54 through column 11, line 8.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7-9, 13, 16-22, 25-28, 31, 32, 34-36, and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norman (US 4,431,524) in view of WO 97/00928.

The Norman reference discloses a process for treating a used oil. The process comprises contacting the oil with an aqueous solution of the basic salt of an alkali metal. The resulting

Art Unit: 1764

mixture is then treated to separate water from the oil. This step necessarily produces an at least partially dehydrated used oil. The used oil is then mixed with a glycol such as ethylene glycol. The oil and glycol mixture is then passed to a separator to remove contaminants from the oil. See column 3, lines 15-48; column 8, lines 13-24; and column 10, line 54 through column 11, line 8.

The Norman reference does not disclose the distillation step, does not disclose that the used oil is the various claimed used oils that contain light hydrocarbons, and does not disclose the amounts of base or glycol.

The WO reference discloses a process for refining used oil. The process comprises contacting the oil with an alkaline reactant in the presence of a solvent such as ethylene glycol. Following the contacting, contaminants are removed from the oil by, among other steps, distillation. See the entire document and column 3, lines 7-55 and column 4, lines 1-47 of equivalent US Patent 6,072,065.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Norman by distilling to remove contaminants at any appropriate set of conditions as suggested by the WO reference because distilling will remove contaminants from a mixture similar to the mixture present in the Norman process and therefore distilling would be expected to be an effective separation method in the process of Norman.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified process of Norman by treating the claimed used oils because such oils are chemically and physically similar to the oils disclosed by Norman and therefore would be expected to be effectively treated in the process of Norman.

Art Unit: 1764

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified process of Norman by using any amounts of base and glycol including the claimed amounts because one of ordinary skill in the art would adjust such amounts to provide the disclosed effect of contaminant removal.

Claims 25-28, 31, 32, 34-36, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/00928.

The WO 97/00928 reference discloses a process for refining used oil. The process comprises contacting the oil with an alkaline reactant in the presence of a solvent such as ethylene glycol. Following the contacting, contaminants are removed from the oil by, among other steps, distillation. See the entire document and column 3, lines 7-55 and column 4, lines 1-47 of equivalent US patent 6,072,065.

The WO reference does not disclose the distillation conditions and does not disclose the amounts of base or glycol.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the WO 97/00928 reference by selecting distillation conditions that would effectively separate the contaminants from the oil including the specific conditions claimed because the range of distillation conditions disclosed in the WO reference indicates that such conditions are selected to obtain desired fractions. One of ordinary skill select appropriate conditions within the framework disclosed by the WO reference in order to produce desired products.

Art Unit: 1764

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the WO reference by using any amounts of base and glycol including the claimed amounts because one of ordinary skill in the art would adjust such amounts to provide the disclosed effect of contaminant removal.

Response to Arguments

The argument relating to claims 25 and 31 that the WO reference does not disclose or suggest distilling a mixture comprising used oil, ethylene glycol, and base compound is not persuasive. Even after the water-washing step of the WO reference, the distillation step eliminates traces of solvent (i.e., glycol). Also, since the water-washing step only removes alkaline reactant in excess, it appears as if a mixture as claimed is distilled in the process of the WO reference.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1764

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
April 22, 2005